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			SINGH, SATWANT K	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/663 522 TAKEYAMA, TOSHIHISA Office Action Summary Examiner Art Unit SATWANT K. SINGH -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 15 September 2003. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-37 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1-6,10,13-21 and 24-37 is/are rejected. 7) Claim(s) 7-9, 11, 12, 22, and 23 is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 15 September 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application 3) Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date _

6) Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- Claims 1-3, 6, 16, 17, 20, 24, 28, 34, and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Farrell et al. (US 6,762,856).
- 3. Regarding Claim 1, Farrell et al discloses an image forming apparatus for forming an image based on digitalized medical image data, comprising: a first image forming material-supplying section supplying a first image forming material (Fig. 2, feeders 20); a second image forming material-supplying section supplying a second image forming material (Fig. 2, feeders 20), which is different from the first image forming material (each feeder preferably includes one or more trays which forward different types of support material to the print engine) (col. 5, lines 19-31); a selecting section selecting an image forming material to be output from the first and second image forming materials (Fig. 2, controller 50) (controller controls and monitors the entire digital printing system) (col. 5, lines 32-54); a converting section converting the digitalized medical image data to an outputting image data, which is suited to the selected image forming material (Fig. 2, interface unit 52) (interface unit processes the

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digital image data in the form required to carry out each programmed job) (col. 5, lines 8-19); an outputting section outputting the outputting image data onto the selected image forming material (Fig. 2, print engine 30) (supporting material forwarded to print engine) (col. 5, lines 8-19); and a post-processing section conducting a post-processing to the selected image forming material to form a final image (Fig. 2, finishers 40) (taking completed pages from the print engine and providing a finished product) (col. 5, lines 19-31).

- 4. Regarding Claim 2, Farrell et al discloses an image forming apparatus, wherein each of the first image forming material and the second image forming material is a tray (each feeder includes one or more trays) (col. 5, lines 19-31).
- 5. Regarding Claim 3, Farrell et al discloses an image forming apparatus, wherein the first image forming material and the second image forming material are different in a color tone or a maximum density from each other when an image is formed on each of the first image forming materials and the second image forming material in same condition (stocks associated with the print media source) (col. 8, line 5-col. 9, line 13).
- Regarding Claim 6, Farrell et al discloses an image forming apparatus, wherein
 the outputting section is a photo-writing device utilizing a laser scan exposure (laser
 based scanning device) (col. 9, line 65-col. 10, line 13).
- 7. Regarding Claim 16, Farrell et al discloses an image forming method for forming an image based on a digitalized medical image data, comprising: selecting an image forming material to be output from plural image forming materials, which are different from each other (each feeder preferably includes one or more trays which forward

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different types of support material to the print engine) (col. 5, lines 19-31); converting the digitalized medical image data to an outputting image data, which is suited to the selected image forming material (interface unit processes the digital image data in the form required to carry out each programmed job) (col. 5, lines 8-19); outputting the outputting image data onto the selected image forming material (supporting material forwarded to print engine) (col. 5, lines 8-19); and conducting a post-processing to the selected image forming material after the outputting step to form a final image (taking completed pages from the print engine and providing a finished product) (col. 5, lines 19-31).

- 8. Regarding Claim 17, Farrell et al discloses an image forming method, wherein the plural image forming materials are different in a color tone or a maximum density from each other when an image is formed on each of the plural image forming materials in same condition (stocks associated with the print media source) (col. 8, line 5-col. 9, line 13).
- Regarding Claim 20, Farrell et al discloses an image forming method, wherein
 the outputting step is conducted by a laser scan exposure (laser based scanning
 device) (col. 9, line 65-col. 10, line 13).
- 10. Regarding Claim 24, Farrell et al discloses an image forming method, wherein the converting step is directly determined in accordance with a result of the selecting step (interface unit processes the digital image data in the form required to carry out each programmed job) (col. 5, lines 8-19).

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 Regarding Claim 28, Farrell et al discloses an image forming method, further comprising displaying the outputting image data on a displaying section (Fig. 3, display unit 57).

12. Regarding Claim 34. Farrell et al teaches an image forming system comprising: a medical image data inputting apparatus including a medical image data-sending section (Fig. 2, image input section 60) (col. 4, lines 44-57); a medical image datamanaging apparatus (Fig. 2, controller 50) including an image data-storing section (Fig. 2, memory 56) and a medical image data- transferring section (system control unit 54) (col. 5, lines 32-54); an image data-converting apparatus including an image forming material-selecting section (Fig. 2, feeders 20) (col. 5, lines 19-31), an image dataconverting section (Fig. 2, interface unit 52) (interface unit processes the digital image data in the form required to carry out each programmed job) (col. 5, lines 8-19) and an outputting image data-transferring section (Fig. 2, system control unit 54) (system control unit receives print engine information form sensors throughout the digital printing system) (col. 5, lines 32-54); and an outputting apparatus including a first image forming material-supplying section supplying a first image forming material (Fig. 2, feeders 20), second image forming material-supplying section supplying a second image forming material (Fig. 2, feeders 20) being different from the first image forming material (each feeder preferably includes one or more trays which forward different types of support material to the print engine) (col. 5, lines 19-31), an outputting section (Fig. 2, print engine 30) (supporting material forwarded to print engine) (col. 5, lines 8-19) and a post-processing section (Fig. 2, finishers 40) (taking completed pages from the print

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engine and providing a finished product), wherein the medical image data-inputting apparatus, the medical image data-managing apparatus, the image data- converting apparatus and the outputting apparatus are connected via a network (Fig. 2, computer network 62), wherein the medical image data-inputting apparatus sends a digitalized medical image data by the medical image data-sending section to the medical image data-managing apparatus (digital image received from computer network(col. 5, lines 8-19), the medical image data-managing apparatus stores the medical image data in the image data-storing section (memory 56); and transfers a medical image data to be output from the image data-storing section to the image data-converting apparatus (interface unit processes the digital image data in the form required to carryout each programmed job) (col. 5, lines 8-19), the image data-converting apparatus selects an image forming material to be output from the first and second image forming materials by the selecting section (feeder forwards different types of support material to the print engine) (col. 5, lines 19-31); converts the transferred medical image data to an outputting image data being suited to the selected image forming material by the image data-converting section (interface unit processes the digital image data in the form required to carry out each programmed job) (col. 5, lines 8-19); and transfers the outputting image data with a result of the selection in the selecting section to the outputting apparatus by the outputting image-transferring section, and the outputting apparatus outputs the outputting image data onto the selected image forming material, which is supplied from the first or second image forming material- supplying section in accordance with the result of selection, by the outputting section (supporting material

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forwarded to print engine) (col. 5, lines 8-19); and conducts a post-processing to the selected image forming material to form a final image (taking completed pages from the print engine and providing a finished product) (col. 5, lines 19-31).

13. Regarding Claim 37, Farrell et al discloses an image forming system, wherein the image forming system comprises two or more of the medical image data-inputting apparatus connected via the network (digital printing system can be coupled to multiple networks or scanning units) (col. 4. lines 44-57).

Claim Rejections - 35 USC § 103

- 14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 15. Claims 4, 5, 10, 18, 19, 21, and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al in view of Oshima et al. (US 6,786,993).
- 16. Regarding Claim 4, Farrell et al fails to teach an image forming apparatus, wherein the first image forming material and the second image forming material are different in at least one of sensitivity, transmittance and a gradient from each other.

Oshima et al teaches an image forming apparatus, wherein the first image forming material and the second image forming material are different in at least one of sensitivity, transmittance and a gradient from each other (illustrative examples of the material of which the subtracted is made) (col. 4, lines 21-31).

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Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Farrell with the teaching of Oshima to provide a protective layer of resin on an image to improve the robustness of the printed image.

17. Regarding Claim 5, Farrell et al fails to teach an image forming apparatus, wherein one of the first image forming material and the second image forming material has a reflective support and the other has a transparent support.

Oshima et al teaches an image forming apparatus, wherein one of the first image forming material and the second image forming material has a reflective support and the other has a transparent support (illustrative examples of the material of which the subtracted is made) (col. 4, lines 21-31).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Farrell with the teaching of Oshima to provide a protective layer of resin on an image to improve the robustness of the printed image.

Regarding Claim 10, Farrell et al fails to teach an image forming apparatus,
 wherein the post-processing section is a heat-processing device.

Oshima et al teaches an image forming apparatus, wherein the post-processing section is a heat-processing device (printer thermal head) (col. 4, lines 4-12).

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to provide a protective layer of resin on an image to improve the robustness of the printed image.

19. Regarding Claim 18, Farrell et al fails to teach an image forming method, wherein the plural image forming materials are different in sensitivity, transmittance or gradient from each other.

Oshima et al teaches an image forming method, wherein the plural image forming materials are different in sensitivity, transmittance or gradient from each other (illustrative examples of the material of which the subtracted is made) (col. 4, lines 21-31).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Farrell with the teaching of Oshima to provide a protective layer of resin on an image to improve the robustness of the printed image.

20. Regarding Claim 19, Farrell et al fails to teach an image forming method, wherein the plural image forming materials include an image forming material having a reflective support and an image forming material having a transparent support.

Oshima et al teaches an image forming apparatus, wherein one of the first image forming material and the second image forming material has a reflective support and the other has a transparent support (illustrative examples of the material of which the subtracted is made) (col. 4, lines 21-31).

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to provide a protective layer of resin on an image to improve the robustness of the printed image.

 Regarding Claim 21, Farrell et al fails to teach an image forming method, wherein the post-processing is a heat-processing device.

Oshima et al teaches an image forming method, wherein the post-processing is a heat-processing device (printer thermal head) (col. 4, lines 4-12).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Farrell with the teaching of Oshima to provide a protective layer of resin on an image to improve the robustness of the printed image.

22. Regarding Claim 31, Farrell et al fails to teach an image forming method, wherein the plural image forming materials each have a support having thereon a image forming layer, which contains a photosensitive silver halide, a photo-insensitive organic silver salt and a reducing agent, and a protective layer.

Oshima et al teaches an image forming method, wherein the plural image forming materials each have a support having thereon a image forming layer, which contains a photosensitive silver halide, a photo-insensitive organic silver salt and a reducing agent, and a protective layer (Fig.1, section of the heat transfer cover film) (col. 3. line 66-col. 67. line 12).

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to provide a protective layer of resin on an image to improve the robustness of the printed image.

23. Regarding Claim 32, Farrell et al fails to teach an image forming method, wherein the plural image forming materials each have an intermediate layer, the image forming layer and the protective layer in that order on the support.

Oshima et al teaches an image forming method, wherein the plural image forming materials each have an intermediate layer, the image forming layer and the protective layer in that order on the support (Fig.1, section of the heat transfer cover film) (col. 3, line 66-col. 67, line 12).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Farrell with the teaching of Oshima to provide a protective layer of resin on an image to improve the robustness of the printed image.

24. Regarding Claim 33, Farrell et al fails to teach an image forming method, wherein the plural image forming materials each have the image forming layer, a barrier layer and the protective layer in that order on the support.

Oshima et al teaches an image forming method, , wherein the plural image forming materials each have the image forming layer, a barrier layer and the protective layer in that order on the support (Fig.1, section of the heat transfer cover film) (col. 3, line 66-col. 67, line 12).

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to provide a protective layer of resin on an image to improve the robustness of the printed image.

- Claims 13-15, 25-27, 29, 30, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al in view of Brewington et al. (US 7,206,099).
- 26. Regarding Claim 13, Farrell et al fails to teach an image forming apparatus, wherein the converting section has at least one of a resolution- converting function, a gradient-converting function, a color- converting function and an LUT converting function.

Brewington et al teaches an image forming apparatus, wherein the converting section has at least one of a resolution- converting function, a gradient-converting function, a color- converting function and an LUT converting function (sensing the diagnostic image) (col. 7, line 54-col. 8, line 12).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teaching of Farrell with the teaching of Brewington to calculate the new color data to compensate for system performance changes depending on the output media selected to maintain color consistency of the image.

27. Regarding Claim 14, Farrell et al fails to teach an image forming apparatus, wherein the converting section has at least one of the resolution converting function, the gradient-converting function and the color-converting function.

Brewington et all teaches an image forming apparatus, wherein the converting section has at least one of the resolution converting function, the gradient-converting

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function and the color-converting function (sensing the diagnostic image) (col. 7, line 54-col. 8, line 12).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teaching of Farrell with the teaching of Brewington to calculate the new color data to compensate for system performance changes depending on the output media selected to maintain color consistency of the image.

Regarding Claim 15, Farrell et al fails to teach an image forming apparatus,
 wherein the converting section has the LUT-converting function.

Brewington et al teaches an image forming apparatus, wherein the converting section has the LUT-converting function (sensing the diagnostic image) (col. 7, line 54-col. 8, line 12).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teaching of Farrell with the teaching of Brewington to calculate the new color data to compensate for system performance changes depending on the output media selected to maintain color consistency of the image.

29. Regarding Claim 25, Farrell et al fails to teach an image forming method, wherein the converting step includes at least one of the steps of converting resolution of the digitalized medical image data, converting gradient of the digitalized medical image data, converting color of the digitalized medical image data, and converting LUT of the digitalized medical image data.

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Brewington et al teaches an image forming method, wherein the converting step includes at least one of the steps of converting resolution of the digitalized medical image data, converting gradient of the digitalized medical image data, converting color of the digitalized medical image data, and converting LUT of the digitalized medical image data (sensing the diagnostic image) (col. 7, line 54-col. 8, line 12).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teaching of Farrell with the teaching of Brewington to calculate the new color data to compensate for system performance changes depending on the output media selected to maintain color consistency of the image.

30. Regarding Claim 26, Farrell et al fails to teach an image forming method, wherein the converting step includes at least one of the step of converting resolution of the digitalized medical image data, converting gradient of the digitalized medical image data and converting color of the digitalized medical image data.

Brewington et al teaches an image forming method, wherein the converting step includes at least one of the step of converting resolution of the digitalized medical image data, converting gradient of the digitalized medical image data and converting color of the digitalized medical image data (sensing the diagnostic image) (col. 7, line 54-col. 8, line 12).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teaching of Farrell with the teaching of Brewington to calculate the new color data to compensate for system performance

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changes depending on the output media selected to maintain color consistency of the image.

31. Regarding Claim 27, Farrell et al fails to teach an image forming method, wherein the converting step includes the step of converting LUT of the digitalized medical image data.

Brewington et al teaches an image forming method, wherein the converting step includes the step of converting LUT of the digitalized medical image data (sensing the diagnostic image) (col. 7, line 54-col. 8, line 12).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teaching of Farrell with the teaching of Brewington to calculate the new color data to compensate for system performance changes depending on the output media selected to maintain color consistency of the image.

32. Regarding Claim 29, Farrell et al fails to teach an image forming method, further comprising correcting the outputting image data for representing the outputting image data displayed by the displaying step onto the image forming material.

Brewington et al teaches an image forming method, further comprising correcting the outputting image data for representing the outputting image data displayed by the displaying step onto the image forming material (Fig, 6, diagnostic image 634) (col. 8, line 37-col. 9, line 59).

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Brewington to correct the image data to compensate for system performance changes depending on the output media selected to maintain color consistency of the image.

33. Regarding Claim 30, Farrell et al fails to teach an image forming method, further comprising checking the final image data whether a desired image has been obtained, correcting the outputting image data in accordance with a result of the checking step, outputting the corrected image data onto the image forming material, and conducting the post-processing to the image forming material.

Brewington et al teaches an image forming method, further comprising checking the final image data whether a desired image has been obtained, correcting the outputting image data in accordance with a result of the checking step, outputting the corrected image data onto the image forming material, and conducting the post-processing to the image forming material (Fig. 6, compensating for system performance changes) (col. 8, line 37-col. 9, line 59).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teaching of Farrell with the teaching of Brewington to correct the image data to compensate for system performance changes depending on the output media selected to maintain color consistency of the image.

34. Regarding Claim 35, Farrell et al fails to teach an image forming system, wherein the converting section has at least one of a resolution-converting function, a gradientconverting function, a color- converting function and an LUT-converting function.

Brewington et al teaches an image forming system, wherein the converting section has at least one of a resolution-converting function, a gradient-converting

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function, a color- converting function and an LUT-converting function (sensing the diagnostic image) (col. 7, line 54-col. 8, line 12).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teaching of Farrell with the teaching of Brewington to calculate the new color data to compensate for system performance changes depending on the output media selected to maintain color consistency of the image.

- Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al in view of Tehranchi et al. (US 6,873,435).
- Regarding Claim 36, Farrell et al fails to teach an image forming system, wherein the medical image data-inputting apparatus is a medical image diagnosis apparatus.

Tehranchi et al teaches an image forming apparatus, wherein the medical image data-inputting apparatus is a medical image diagnosis apparatus (medical and industrial diagnostic images) (col. 13, lines 33-47).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have combined the teachings of Farrell with the teaching of Tehranchi to output prints for use in the medical industry.

Allowable Subject Matter

37. Claims 7-9, 11, 12, 22, and 23 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kuga (US 6,285,844) discloses an image forming method and apparatus with automatic paper selection capability.

Butterfield et al. (US 6,366,362) discloses a method and apparatus to maintain constant tone reproduction on a printed output over time.

Mestha et al. (US 7,110,142) discloses a system and method for sensing marking substrate area coverage using a spectrophotometer.

Platt (US 2002/0047798) discloses an image acquisition and retrieval system employing position data.

Sawada (US 2006/0176531) discloses methods and apparatus for forming images on recording media of different sizes.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SATWANT K. SINGH whose telephone number is (571)272-7468. The examiner can normally be reached on Monday thru Friday 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Edward L. Coles/ Supervisory Patent Examiner, Art Unit 2625 /Satwant K. Singh/ Examiner, Art Unit 2625

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